

Advant[®] OCS

Advant Connectivity Library
for Advant Controller 100 Series
Version 1.0

Reference Manual

3BSE 017 085R101

NOTICE

The information in this document is subject to change without notice and should not be construed as a commitment by ABB Automation Products AB. ABB Automation Products AB assumes no responsibility for any errors that may appear in this document.

In no event shall ABB Automation Products AB be liable for direct, indirect, special, incidental, or consequential damages of any nature or kind arising from the use of this document, nor shall ABB Automation Products AB be liable for incidental or consequential damages arising from use of any software or hardware described in this document.

This document and parts thereof must not be reproduced or copied without ABB Automation Products AB's written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorized purpose.

The software described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

TRADEMARKS

Advant, AdvaCommand, AdvaInform, and AdvaBuild are registered trademarks of ABB Asea Brown Boveri Ltd., Switzerland.

Windows and Windows NT are registered trademarks of Microsoft Inc.

TABLE OF CONTENTS

Chapter 1 - Introduction

1.1	About This Book	1
1.2	Related Documentation	3
1.3	Conventions.....	5
1.4	Terminology	6

Chapter 2 - Installation.....7

Chapter 3 - Graphic Elements

3.1	Graphic Elements - Overview	9
3.2	Analog Input AIS	12
3.2.1	Dialog	12
3.2.1.1	AiControl	12
3.2.1.2	AiLimits.....	14
3.2.2	Presentation	16
3.2.2.1	AiStatus	16
3.2.2.2	AiCloseup	17
3.2.2.3	Numeric01	20
3.2.2.4	Bargraph01	22
3.3	Analog Output AOS	25
3.3.1	Dialog	25
3.3.1.1	AoControl	25
3.3.2	Presentation	27
3.3.2.1	AoStatus.....	27
3.3.2.2	AoCloseup	28
3.3.2.3	Numeric01	30
3.3.2.4	Bargraph 01	31

CONTENTS (continued)

- 3.4 Digital Input DIS 33
 - 3.4.1 Dialog..... 33
 - 3.4.1.1 DiControl..... 33
 - 3.4.2 Presentation..... 34
 - 3.4.2.1 DiStatus 34
 - 3.4.2.2 DiCloseup..... 35
 - 3.4.2.3 IndicatorBox01..... 36
- 3.5 Digital Output DOS 38
 - 3.5.1 Dialog..... 38
 - 3.5.1.1 DoControl..... 38
 - 3.5.2 Presentation..... 40
 - 3.5.2.1 DoStatus 40
 - 3.5.2.2 DoCloseup..... 41
 - 3.5.2.3 IndicatorBox01..... 42
- 3.6 Analog Input DAT_AI 43
 - 3.6.1 Dialog..... 43
 - 3.6.1.1 DAiControl..... 43
 - 3.6.2 Presentation..... 44
 - 3.6.2.1 DAiCloseup..... 44
 - 3.6.2.2 Numeric01..... 45
- 3.7 Analog Output DAT_AO 46
 - 3.7.1 Dialog..... 46
 - 3.7.1.1 DAoControl..... 46
 - 3.7.2 Presentation..... 48
 - 3.7.2.1 DAoCloseup..... 48
 - 3.7.2.2 Numeric01..... 49

CONTENTS (continued)

3.8	Digital Input DAT_DI	50
3.8.1	Dialog	50
3.8.1.1	DDiControl	50
3.8.2	Presentation	51
3.8.2.1	DDiCloseup	51
3.8.2.2	IndicatorBox01	52
3.9	Digital Output DAT_DO	53
3.9.1	Dialog	53
3.9.1.1	DDoControl	53
3.9.2	Presentation	54
3.9.2.1	DDoCloseup	54
3.9.2.2	IndicatorBox01	55
3.10	Analog Input DAT_DAT	56
3.10.1	Dialog	56
3.10.1.1	DDatControl	56
3.10.2	Presentation	58
3.10.2.1	NumericString01	58
3.11	Boolean Data MB	59
3.11.1	Dialog	59
3.11.1.1	MBControl	59
3.11.2	Presentation	60
3.11.2.1	NumericString01	60
3.12	Boolean Value MBS	61
3.12.1	Dialog	61
3.12.1.1	MBSControl	61
3.12.2	Presentation	62
3.12.2.1	IndicatorBox01	62

CONTENTS (continued)

- 3.13 Integer Data MI..... 63
 - 3.13.1 Dialog..... 63
 - 3.13.1.1 MIControl..... 63
 - 3.13.2 Presentation..... 64
 - 3.13.2.1 Numeric01..... 64
- 3.14 Integer Long Data MIL 65
 - 3.14.1 Dialog..... 65
 - 3.14.1.1 MILControl 65
 - 3.14.2 Presentation..... 66
 - 3.14.2.1 Numeric01..... 66
- 3.15 Real Data MR 67
 - 3.15.1 Dialog..... 67
 - 3.15.1.1 MRControl 67
 - 3.15.2 Presentation..... 68
 - 3.15.2.1 Numeric01..... 68
- Chapter 4 - Maintenance 69**

Chapter 1 Introduction

1.1 About This Book

The Advant Connectivity Library for AC100 Series consist of the following components, built on ABB's knowledge of the AC100 Series and of process automation:

- The Object Types for the Advant Controllers 100 Series
 - Analog Input **AIS**
 - Analog Output **AOS**
 - Digital Input **DIS**
 - Digital Output **DOS**
 - Analog Input **DAT_AI**
 - Analog Output **DAT_AO**
 - Digital Input **DAT_DI**
 - Digital Output **DAT_DO**
 - Analog Input **DAT_DAT**
 - Boolean Data **MB**
 - Boolean Value **MBS**
 - Integer Data **MI**
 - Integer Long Data **MIL**
 - Real Data **MR**

- The process Control Aspects for each object type. Each PCA contains the following
 - The name, data type, access rights (read/write) and subscription update rate of each attribute
 - The name of the corresponding OPC item (object of the controller)
 - A user interface to inspect the object type attribute information. It can also be used to subscribe for the current value of each attribute.
- The display elements aspects of each type (Close-up where relevant and a number of additional graphical presentations)
- A process dialog aspect for each type.

The Object types also include additional aspects such as an Icon aspect, an Alarm List aspect (for the instantiated object), and Trend aspect. This book is focused on describing the display elements and process dialogs.

The Use of Warning, Caution, Information, and Tip in this book

This publication includes **Warning**, **Caution**, and **Information** where appropriate to point out safety related or other important information. It also includes **Tip** to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:



Warning indicates the presence of a hazard which could result in *personal injury*.



Caution indicates the presence of a hazard which could result in *equipment or property damage*.



Information alerts the reader to pertinent facts and conditions.



Tip indicates advice on, for example, how to design your project or how to use a certain function.

Although **Warning** hazards are related to personal injury, and **Caution** hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result in degraded process performance leading to personal injury or death. Therefore, comply fully with all **Warning** and **Caution** notices.

1.2 Related Documentation

[Table 1-1](#) lists all documentation related to Advant Connectivity Library for Advant Controller 100 Series.

Table 1-1. Related Documentation

Category	Title	Description
System Administration	Advant Workplace Products Administrator's Guide	This book describes how you install the Advant Workplace Products software, including software features, and how you then perform maintenance.
Software	Advant Graphics User's Guide	This book describes how you build and use graphics in Advant Workplace Products. It includes information about the basic building blocks provided by ABB.

Table 1-1. Related Documentation (Continued)

Category	Title	Description
Other	Advant Workplace Products for Operators Product Guide	This book is a presentation of the software and software options in Advant Workplace Products for Operators. It also includes hardware and software requirements and specifications.
	Advant Workplace Engineering Methods Reference Manual	This book is intended as a guide for plant engineering using Advant Workplace Products software together with Advant Controller 100 Series.
	Data Base Elements Advant Controller 100 Series Reference Manual	This book is intended as a guide for users who configure Advant Controller 100 Series systems.

1.3 Conventions

The following conventions are used throughout this book for the presentation of material:

- The words in proper names of screen elements (for example, the title in the title bar of a window, the label for a field of a dialog box) are initially capitalized.
- Capital letters are used for the name of a keyboard key if it is labeled on the keyboard. For example, press the ENTER key.
- Lowercase letters are used for the name of a keyboard key that is not labeled on the keyboard. For example, the **space bar**, **comma key**, and so on.
- A plus sign is used to indicate that you must simultaneously press several keys. For example, CTRL+C indicates that you must hold down the CTRL key while pressing the C key.
- The phrase “press and release” is used to indicate that you sequentially press several keys. For example, to close a window, press and release ALT, and then F4. This indicates that you press and release the ALT key, and then you press and release the F4 function key.
- The names of push and toggle buttons are boldfaced. For example, click **OK**.
- The names of menus and menu items are boldfaced. For example, the **File** menu.
- The following convention is used for menu operations: MenuName > MenuItem > CascadedMenuItem. For example: choose **File** > **New** > **Type**.
- The **Start** menu name always refers to the **Start** menu on the Windows NT Task Bar.
- System prompts/messages are shown in the Courier font, and user responses/input are in the boldfaced Courier font. For example, if you enter a value out of range, the following message is displayed:

Entered value is not valid. The value must be 0-30.

In a tutorial, you may be told to enter the string TIC132 in a field. The string is shown as follows in the procedure:

TIC132

Chapter 2 Installation

Advant Connectivity Library for Advant Controller 100 Series is an option to the AdvaSoft 2.0 for Windows NT software package. It is installed and configured according to the instructions in the *Advant Workplace Products - Administrator's Guide*.

Chapter 3 Graphic Elements

This chapter gives you a detailed catalog of the graphic elements for Advant Connectivity Library for Advant Controller 100 Series, used in AdvaSoft 2.0 for Windows NT.

3.1 Graphic Elements - Overview

The Avant Connectivity Library for Advant Controller 100 Series is shown in the table below.

Table 3-1. The Avant Connectivity Library for AC100 Series

Type	Name
Process Dialog for Analog Input AIS	AiControl
	AiLimits
	AiStatus
	AiCloseup
	Numeric01
	Bargraph01
Process Dialog for Analog Output AOS	AoControl
	AoStatus
	AoCloseup
	Numeric01
	Bargraph 01

Table 3-1. The Avant Connectivity Library for AC100 Series (Continued)

Type	Name
Process Dialog for Digital Input DIS	DiControl
	DiStatus
	DiCloseup
	IndicatorBox01
Process Dialog for Digital Output DOS	DoControl
	DoStatus
	DoCloseup
	IndicatorBox01
Process Dialog for Analog Input DAT_AI	DAiControl
	DAiCloseup
	Numeric01
Process Dialog for Analog Output DAT_AO	DAoControl
	DAoCloseup
	Numeric01
Process Dialog for Digital Input DAT_DI	DDiControl
	DDiCloseup
	IndicatorBox01
Prodess Dialog for Digital Output DAT_DO	DDoControl
	DDoCloseup
	IndicatorBox01
Process Dialog for Analog Input DAT_DAT	DDatControl
	NumericString01

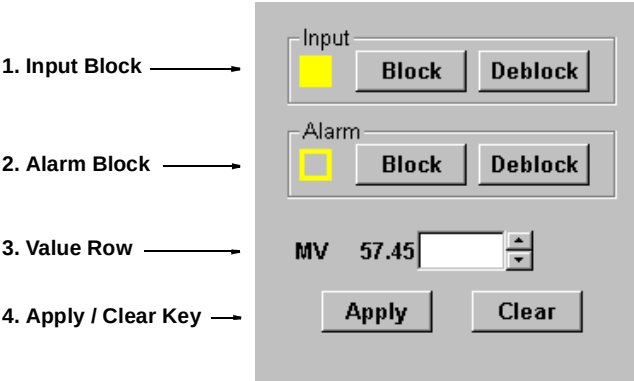
Table 3-1. The Avant Connectivity Library for AC100 Series (Continued)

Type	Name
Process Dialog for Boolean Data MB	MBControl
	NumericString01
Process Dialog for Boolean Value MBS	MBControl
	IndicatorBox01
Process Dialog for Integer Data MI	MIControl
	Numeric01
Process Dialog for Integer Long Data MIL	MILControl
	Numeric01
Process Dialog for Real Data MR	MRControl
	Numeric01

3.2 Analog Input AIS

3.2.1 Dialog

3.2.1.1 AiControl



No	Description	Presentation	Condition	Remarks
1	Input Block	■ Filled Yellow	UPD_BLK = 1	<i>Input blocked by operator</i>
		□ Unfilled Yellow	UPD_BLK = 0	
2	Alarm Block	■ Filled Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
		□ Unfilled Yellow	ALARM_BLK = 0	
3	Value Row			<i>The object value</i>
3.1	MV	MV Black		<i>Text in front of the value</i>
3.2	Value		VALUE	<i>The Object value</i>
		X X XRed	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
3.3	Input Field	Grey	UPD_BLK = 0	
		White	UPD_BLK = 1 and No value	

No	Description	Presentation	Condition	Remarks
		Yellow	UPD_BLK = 1 and Entered value	
3.4	Spin Button		In use if UPD_BLK = 1	
3.5	Unit	Black	UNIT	<i>Object unit</i>
4	Apply/ Clear Key		In use if UPD_BLK = 1	

The VALUE property can be changed either with the spin button or by typing into the input field. The spin button and input field is enabled only if UPD_BLK is true. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.2.1.2 AiLimits

1. High Limit2

2. High Limit1

3. Low Limit1

4. Low Limit2

H2

90.00

H1

80.00

L1

20.00

L2

10.00

Apply

Clear

No	Description	Presentation	Condition	Remarks
1	High Limit2			The high limit2 value
1.1	Alarm Blocked	B Yellow	ALARM_BLK = 1	Alarm blocked by operator
1.2	Alarm Indication	 Red	ABOVE_HI_LIM2 = 1	Alarm high limit2
1.3	H2 Text	H2 Black		Text in front of the value
1.4	H2 Value	Black	HI_LIM2	High limit2 value
1.5	Input Field	Grey	USE_HI_LIM2 = 0	
		White	USE_HI_LIM2 = 1 and No value	
		Yellow	USE_HI_LIM2 = 1 and Entered value	
1.6	Spin Button		In use if USE_HI_LIM2 = 1	
2	High Limit1			The high limit1 value
2.1	Alarm Blocked	B Yellow	ALARM_BLK = 1	Alarm blocked by operator
2.2	Alarm Indication	 Red	ABOVE_HI_LIM1 = 1	Alarm high limit1
2.3	H1 Text	H1 Black		Text in front of the value
2.4	H1 Value	Black	HI_LIM1	High limit1 value

No	Description	Presentation	Condition	Remarks
2.5	Input Field	Grey	USE_HI_LIM1 = 0	
		White	USE_HI_LIM1 = 1 and No value	
		Yellow	USE_HI_LIM1 = 1 and Entered value	
2.6	Spin Button		In use if USE_HI_LIM1 = 1	
3	Low Limit1			<i>The low limit1 value</i>
3.1	Alarm Blocked	B Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
3.2	Alarm Indication	 Red	BELOW_LO_LIM1 = 1	<i>Alarm low limit1</i>
3.3	L1 Text	L1 Black		<i>Text in front of the value</i>
3.4	L1 Value	Black	LO_LIM1	<i>Low limit1 value</i>
3.5	Input Field	Grey	USE_LO_LIM1 = 0	
		White	USE_LO_LIM1 = 1 and No value	
		Yellow	USE_LO_LIM1 = 1 and Entered value	
3.6	Spin Button		In use if USE_HI_LIM1 = 1	
4	Low Limit2			<i>The low limit2 value</i>
4.1	Alarm Blocked	B Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
4.2	Alarm Indication	 Red	BELOW_LO_LIM2 = 1	<i>Alarm low limit2</i>
4.3	L2 Text	L2 Black		<i>Text in front of the value</i>
4.4	L2 Value	Black	LO_LIM2	<i>Low limit2 value</i>
4.5	Input Field	Grey	USE_LO_LIM2 = 0	
		White	USE_LO_LIM2 = 1 and No value	
		Yellow	USE_LO_LIM2 = 1 and Entered value	
4.6	Spin Button		In use if USE_LO_LIM2 = 1	

The properties HI_LIM2, HI_LIM1, LO_LIM1 and LO_LIM2 can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.2.2 Presentation

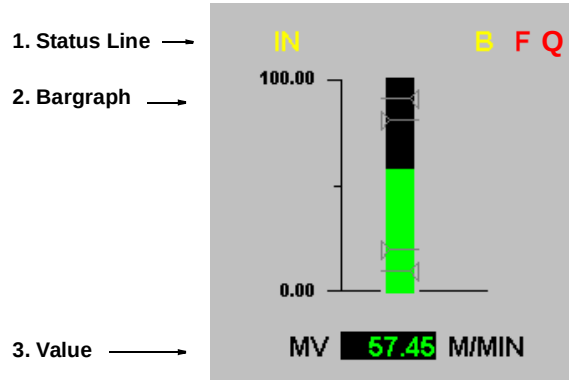
3.2.2.1 AiStatus

- 1. Implemented Indication →
- 2. Updated Indication →
- 3. Alarm Block Indication →
- 4. Disturbance Indication →
- 5. Signal Error Indication →

-  Implemented
-  Updated
-  Alarm Period Block
-  Disturbance
-  Signal Error

No	Description	Presentation	Condition	Remarks
1	Implemented Indication	 Green	ACTIVE = 1	<i>Implemented</i>
2	Updated Indication	 Green	UPDATED = 1	<i>Updated</i>
3	Alarm Block Indication	 Yellow	ALARM_BLK = 1	<i>Alarm Block</i>
4	Disturbance Indication	 Red	DISTURBANCE = 1	<i>Disturbance</i>
5	Signal Error Indication	 Red	ERROR = 1	<i>Signal Error</i>

3.2.2.2 AiCloseup



No	Description	Presentation	Condition	Remarks
1	Status Line			Status Line
1.1	Input Blocked	IN Yellow	UPD_BLK	Input Blocked
1.2	Alarm Blocked	B Yellow	ALARM_BLK = 1	Alarm blocked by operator
1.3	Alarm Indication	F Red	DISTURBANCE = 1	Alarm
1.4	Error Indication	Q Red	ERROR = 1	Error
2	Bargraph Pre- sentation			The Bargraph
2.1	Range Max	Black	RANGE_MAX	Range Max of the object
2.2	Range Min	Black	RANGE_MIN	Range Min of the object
2.3	Value		VALUE	The object value
		X Red	The Value Quality is not OK	
		? Red	ERROR = 1	
		Green	-	

No	Description	Presentation	Condition	Remarks
2.4	High Limit2 		HI_LIM2	High limit2 value
		-	HI_LIM2 >= RANGE_MAX or USE_HI_LIM2 = 0	Invisible
		Filled Yellow	ABOVE_HI_LIM2 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	ABOVE_HI_LIM2 = 1	
		Unfilled Grey	-	
2.5	High Limit1 		HI_LIM1	High limit1 value
		-	HI_LIM1 >= RANGE_MAX or USE_HI_LIM1 = 0	Invisible
		Filled Yellow	ABOVE_HI_LIM1 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	ABOVE_HI_LIM1 = 1	
		Unfilled Grey	-	
2.6	Low Limit1 		LO_LIM1	Low limit1 value
		-	LO_LIM1 <= RANGE_MIN or USE_LO_LIM1 = 0	Invisible
		Filled Yellow	BELOW_LO_LIM1 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	BELOW_LO_LIM1 = 1	
		Unfilled Grey	-	
2.7	Low Limit2 		LO_LIM2	Low limit2 value
		-	LO_LIM2 <= RANGE_MIN or USE_LO_LIM2 = 0	Invisible
		Filled Yellow	BELOW_LO_LIM2 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	BELOW_LO_LIM2 = 1	

No	Description	Presentation	Condition	Remarks
		Unfilled Grey	-	
3	Value Row			<i>The object value</i>
3.1	MV	MV Black		<i>Text in front of the value</i>
3.2	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		? ? ? Red	ERROR = 1	<i>I/O Error</i>
		Green	-	
3.3	Unit	Black	UNIT	<i>Object unit</i>

3.2.2.3 Numeric01

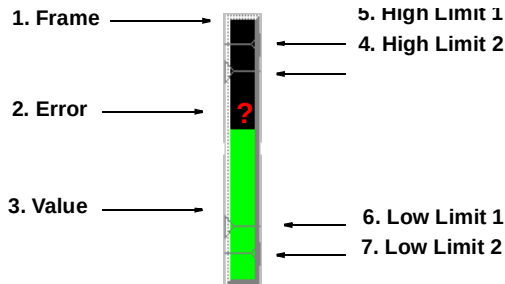


No	Description	Presentation	Condition	Remarks
1.1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
1.2	Border	Dotted Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
		-	ALARM_BLK = 0	<i>Border invisible</i>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		? ? ? Red	ERROR = 1	<i>I/O Error</i>
		Yellow	UPD_BLK =1	<i>Input blocked</i>
		Red	DISTURBANCE = 1	<i>Alarm</i>
		Green	-	<u>ValueFormat</u>
3	Unit		<u>UnitVisible</u> = True	<i>Object unit</i>
		Black	UNIT	
		-	<u>UnitVisible</u> = False	<i>Unit is invisible</i>

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals is possible</i>
UnitVisible	3. Unit	True , False	

3.2.2.4 Bargraph01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Error	? Yellow	ERROR = 1 and UPD_BLK = 1	<i>I/O Error and Input blocked</i>
		? Red	ERROR = 1	<i>I/O Error</i>
		-	ERROR = 0	<i>Invisible</i>
3	Value		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		-	ERROR = 1	<i>Invisible - I/O Error</i>
		Yellow	UPD_BLK = 1	<i>Input blocked</i>
		Red	DISTURBANCE = 1	<i>Alarm</i>
		Green	-	<u>StartValue</u>
4	High Limit2 		HI_LIM2	<i>High limit2 value</i>
		-	HI_LIM2 >= RANGE_MAX or USE_HI_LIM2 = 0	<i>Invisible</i>
		Filled Yellow	ABOVE_HI_LIM2 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	

No	Description	Presentation	Condition	Remarks
5	High Limit1 	Filled Red	ABOVE_HI_LIM2 = 1	
		Unfilled Grey	-	
		-	HI_LIM1	High limit1 value
		-	HI_LIM1 >= RANGE_MAX or USE_HI_LIM1 = 0	Invisible
		Filled Yellow	ABOVE_HI_LIM1 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	ABOVE_HI_LIM1 = 1	
6	Low Limit1 	-	LO_LIM1	Low limit1 value
		-	LO_LIM1 <= RANGE_MIN or USE_LO_LIM1 = 0	Invisible
		Filled Yellow	BELOW_LO_LIM1 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	BELOW_LO_LIM1 = 1	
		Unfilled Grey	-	
		-	LO_LIM2	Low limit2 value
7	Low Limit2 	-	LO_LIM2 >= RANGE_MIN or USE_LO_LIM2 = 0	Invisible
		Filled Yellow	BELOW_LO_LIM2 = 1 and ALARM_BLK = 1	
		Unfilled Yellow	ALARM_BLK = 1	
		Filled Red	BELOW_LO_LIM2 = 1	
		Unfilled Grey	-	

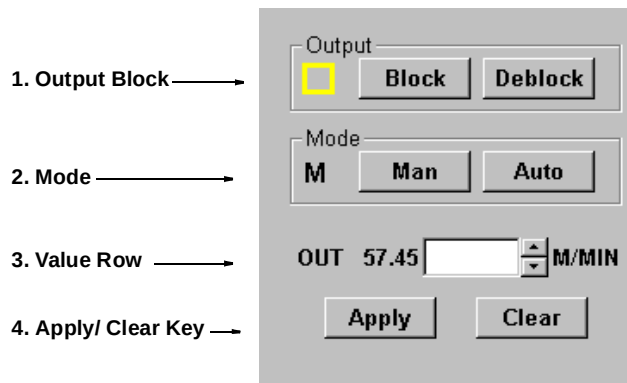
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Orientation	Bargraph01	Horizontal or Vertical	
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
StartValue	2. Value	0	<i>Start position for the value</i>

3.3 Analog Output AOS

3.3.1 Dialog

3.3.1.1 AoControl



No	Description	Presentation	Condition	Remarks
1	Output Block	■ Filled Yellow	OUTP_BLK = 1	Output blocked by operator
		□ Unfilled Yellow	OUTP_BLK = 0	
2	Mode	M Black	MAN_MODE = 1	Mode
		A Black	MAN_MODE = 0	
3	Value Row			The object value
3.1	OUT	OUT Black		Text in front of the value
3.2	Value		VALUE	Object value
		X X X Red	The Value Quality is not OK	No subscription
		Black	-	
3.3	Input Field	Grey	MAN_MODE = 0	

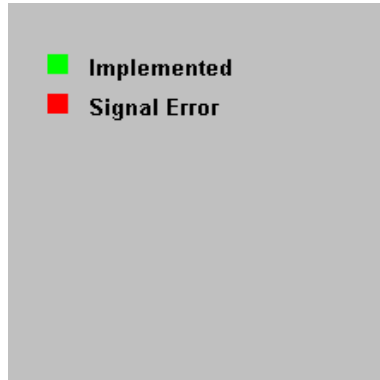
No	Description	Presentation	Condition	Remarks
3.4	Spin Button	White	MAN_MODE = 1 and No value	
		Yellow	MAN_MODE = 1 and Entered value	
			In use if MAN_MODE = 1	
3.5	Unit	Black	UNIT	<i>Object unit</i>
4	Apply/ Clear Key		In use if MAN_MODE = 1	

The VALUE property can be changed either with the spin button or by typing into the input field. The spin button and input field is enabled only if MAN_MODE is true. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.3.2 Presentation

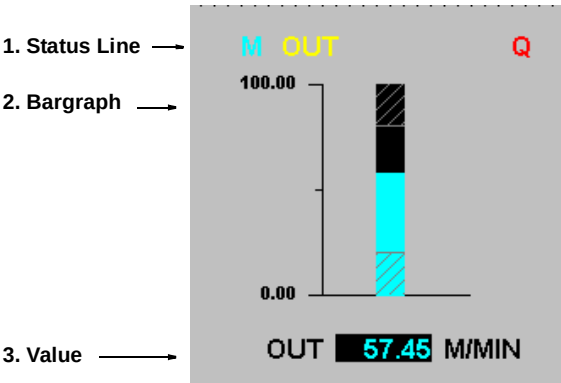
3.3.2.1 AoStatus

1. Implemented Indication →
2. Signal Error Indication →



No	Description	Presentation	Condition	Remarks
1	Implemented Indication	■ Green	ACTIVE = 1	<i>Implemented</i>
2	Signal Error Indication	■ Red	ERROR = 1	<i>Signal Error</i>

3.3.2.2 AoCloseup



No	Description	Presentation	Condition	Remarks
1	Status Line			Status Line
1.1	Mode	M Cyan	MAN_MODE = 1	Mode
		A Magenta	MAN_MODE = 0	
1.2	Output Blocked	OUT Yellow	OUTP_BLK = 1	Output Blocked
1.3	Error Indication	Q Red	ERROR = 1	Error
2	Bargraph Pre- sentation			Status Line
2.1	Range Max	Black	RANGE_MAX	Range Max of the object
2.2	Range Min	Black	RANGE_MIN	Range Min of the object
2.3	Value		VALUE	The object value
		X Red	The Value Quality is not OK	No subscription
		Cyan	MAN_MODE = 1	
		Magenta	MAN_MODE = 0	
2.4	High Limit		HI_LIM	High limit value
		-	HI_LIM >= RANGE_MAX	Invisible

No	Description	Presentation	Condition	Remarks
2.5	Low Limit	Yellow	ON_MAX_LIM = 1	
		Grey	-	
			LO_LIM	Low limit value
		-	LO_LIM <= RANGE_MIN	Invisible
3	Value Row	Yellow	ON_MIN_LIM = 1	
		Grey	-	
				The object value
3.1	OUT	OUT	Black	Text in front of the value
3.2	Value		VALUE	Object value
3.3	Unit	X X X	Red	The Value Quality is not OK
		Cyan	MAN_MODE = 1	No subscription
		Magenta	MAN_MODE = 0	
		Black	UNIT	Object unit

3.3.2.3 Numeric01

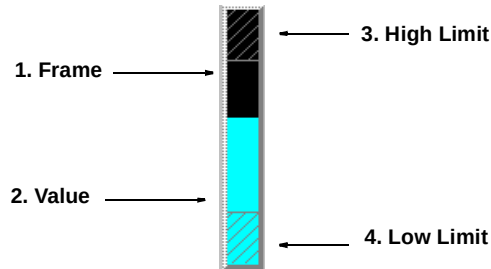


No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value	VALUE	VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Yellow	OUTP_BLK =1	<i>Output blocked</i>
		Red	ERROR = 1	<i>Error</i>
		Cyan	MAN_MODE = 1	
		Magenta	-	<u>ValueFormat</u>
3	Unit		<u>UnitVisible</u> = True	<i>Object unit</i>
		Black	UNIT	
		-	<u>UnitVisible</u> = False	<i>Unit is invisible</i>

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals i possible</i>
UnitVisible	3. Unit	True , False	

3.3.2.4 Bargraph 01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	FrameStyle = Flat or FrameStyle = Raised or FrameStyle = Sunken	Three Dimensions effect <u>FrameWidth</u>
2	Value		VALUE	The object value
		X Red	The Value Quality is not OK	No subscription
		Yellow	OUTP_BLK =1	Output blocked
		Red	ERROR = 1	Error
		Cyan	MAN_MODE = 1	
		Magenta	-	<u>StartValue</u>
3	High Limit		HI_LIM	High limit value
		-	HI_LIM >= RANGE_MAX	Invisible
		Yellow	ON_MAX_LIM = 1	
		Grey	-	
4	Low Limit		LO_LIM	Low limit value
		-	LO_LIM <= RANGE_MIN	Invisible
		Yellow	ON_MIN_LIM = 1	
		Grey	-	

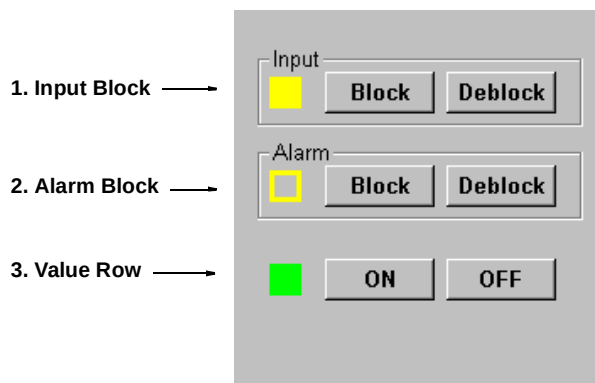
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Orientation	Bargraph 01	Horizontal or Vertical	
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
StartValue	2. Value	0	<i>Start position for the value</i>

3.4 Digital Input DIS

3.4.1 Dialog

3.4.1.1 DiControl



No	Description	Presentation	Condition	Remarks
1	Input Block	■ Filled Yellow	UPD_BLK = 1	<i>Input blocked by operator</i>
		□ Unfilled Yellow	UPD_BLK = 0	
2	Alarm Block	■ Filled Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
		□ Unfilled Yellow	ALARM_BLK = 0	
3	Value Row		VALUE	<i>The object value</i>
3.1	Value Indication	X Red	The Value Quality is not OK	<i>No subscription</i>
		■ Filled Green	VALUE = 1	
		□ Unfilled Green	VALUE = 0	
3.2	ON / OFF Keys		In use if UPD_BLK = 1	

The properties UPD_BLK and ALARM_BLK can be changed through the buttons Block/Deblock with dynamic updating. Changes to these settings are immediately applied.

The property VALUE can be changed with the On/Off buttons. This is only possible if UPD_BLK is true, otherwise the On/Off buttons are dimmed. The change will be immediately applied.

3.4.2 Presentation

3.4.2.1 DiStatus

1. Implemented Indication —————→

2. Updated Indication —————→

3. Alarm Block Indication —————→

4. Alarm Period Block Indication —————→

5. Disturbance Indication —————→

6. Signal Error Indication —————→
- Implemented

■ Updated

■ Alarm Block

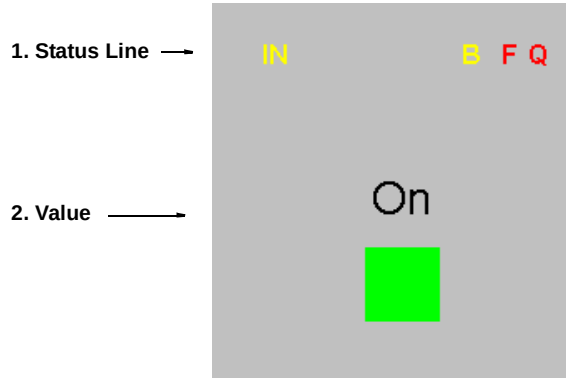
■ Alarm Period Block

■ Disturbance

■ Signal Error

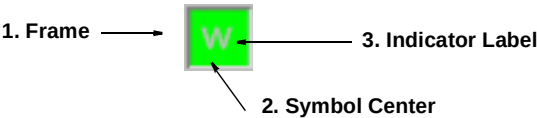
No	Description	Presentation	Condition	Remarks
1	Implemented Indication	■ Green	ACTIVE = 1	Implemented
2	Updated Indication	■ Green	UPDATED = 1	Updated
3	Alarm Block Indication	■ Yellow	ALARM_BLK = 1	Alarm Block
4	Alarm Period Block Indication	■ Yellow	ALARM_PERIOD_BLK = 1	Alarm Period Block Not implemented in AF100
5	Disturbance Indication	■ Red	DISTURBANCE = 1	Disturbance
6	Signal Error Indication	■ Red	ERROR = 1	Signal Error

3.4.2.2 DiCloseup



No	Description	Presentation	Condition	Remarks
1	Status Line			Status Line
1.1	Input Blocked	IN Yellow	UPD_BLK	Input Blocked
1.2	Alarm Blocked	B Yellow	ALARM_BLK = 1	Alarm blocked by operator
1.3	Alarm Indication	F Red	DISTURBANCE = 1	Alarm
1.4	Error Indication	Q Red	ERROR = 1	Error
2	Value		VALUE	Object value
2.1	Value Text	X Red	The Value Quality is not OK	No subscription
		On Black	VALUE = 1	
		Off Black	VALUE = 0	
2.2	Value Indication	X Red	The Value Quality is not OK	No subscription
		■ Filled Green	VALUE = 1	Value indication
		□ Unfilled Green	VALUE = 0	

3.4.2.3 IndicatorBox01



No	Description	Presentation	Condition	Remarks
1.1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken <u>FrameWidth</u>	<i>Three Dimensions effect</i>
1.2	Border	Dotted Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
		-	ALARM_BLK = 0	<i>Border invisible</i>
2	Symbol Center		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	ERROR = 1	<i>Error</i>
		Yellow	UPD_BLK =1	<i>Updated blocked</i>
		Red	DISTURBANCE = 1	<i>Alarm</i>
		Green	-	
3	Indicator Label			<i>Label</i>
		Q Yellow	UPD_BLK = 1and ERROR =1	<i>Updated blocked and Error</i>
		Q Red	ERROR =1	<i>Error</i>
		<u>Label</u> Grey		<i>User defined characters</i>

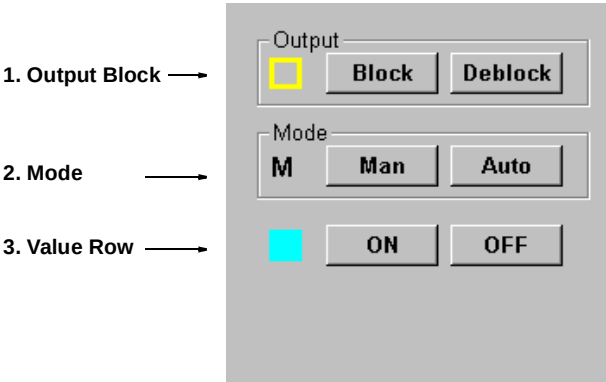
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
Label	3. Indicator Label	" ", any letter	

3.5 Digital Output DOS

3.5.1 Dialog

3.5.1.1 DoControl



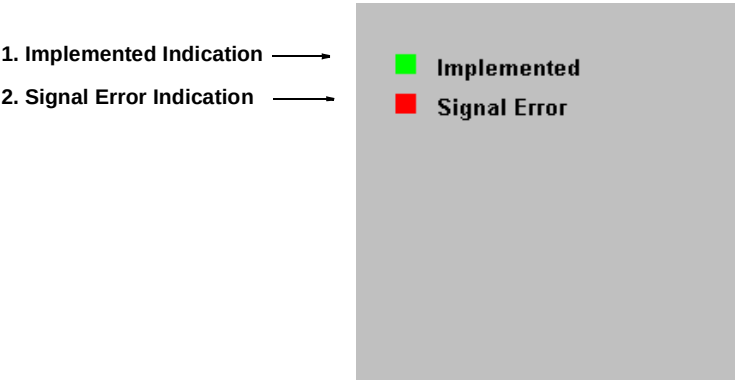
No	Description	Presentation	Condition	Remarks
1	Output Block	■ Filled Yellow	OUTP_BLK = 1	Output blocked by operator
		□ Unfilled Yellow	OUTP_BLK = 0	
2	Mode	M Black	MAN_MODE = 1	Mode
		A Black	MAN_MODE = 0	
3	Value Row		VALUE	The object value
3.1	Value Indication	X Red	The Value Quality is not OK	No subscription
		■ Filled	VALUE = 1	Value
		□ Unfilled	VALUE = 0	
3.2	Value Color	Cyan	MAN_MODE = 1	Mode
		Magenta	MAN_MODE = 0	
3.3	ON / OFF Keys		In use if MAN_MODE = 1	

The properties OUTP_BLK can be changed through the buttons Block/Deblock and MAN_MODE can be changed through the buttons Man/Auto with dynamic updating. Changes to these settings are immediately applied.

The property VALUE can be changed with the On/Off buttons. This is only possible if OUTP_BLK is true, otherwise the On/Off buttons are dimmed. The change will be immediately applied.

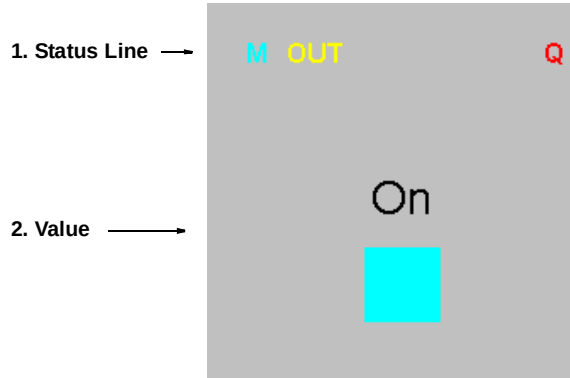
3.5.2 Presentation

3.5.2.1 DoStatus



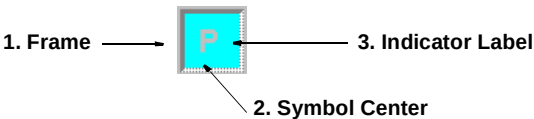
No	Description	Presentation	Condition	Remarks
1	Implemented Indication	■ Green	ACTIVE = 1	Implemented
2	Signal Error Indication	■ Red	ERROR = 1	Signal Error

3.5.2.2 DoCloseup



No	Description	Presentation	Condition	Remarks
1	Status Line			Status Line
1.1	Mode	M Cyan	MAN_MODE = 1	Mode
		A Magenta	MAN_MODE = 0	
1.2	Output Blocked	OUT Yellow	OUTP_BLK	Output Blocked
1.3	Error Indication	Q Red	ERROR = 1	Error
2	Value			Status Line
2.1	Value Text	X Red	The Value Quality is not OK	No subscription
		On Black	VALUE = 1	
		Off Black	VALUE = 0	
2.2	Value Indication	X Red	The Value Quality is not OK	No subscription
		■ Filled	VALUE = 1	Value
		□ Unfilled	VALUE = 0	
2.3	Value Color	Cyan	MAN_MODE = 1	Mode
		Magenta	MAN_MODE = 0	

3.5.2.3 IndicatorBox01



No	Description	Presentation	Condition	Remarks
1.1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
1.2	Border	Dotted Yellow	ALARM_BLK = 1	<i>Alarm blocked by operator</i>
		-	ALARM_BLK = 0	<i>Border invisible</i>
2	Symbol Center		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		Yellow	OUTP_BLK =1	<i>Output blocked</i>
		Red	ERROR = 1	<i>Error</i>
		Cyan	MAN_MODE = 1	
		Magenta	-	
3	Indicator Label			<i>Label</i>
		<u>Label</u> Grey		<i>User defined characters</i>

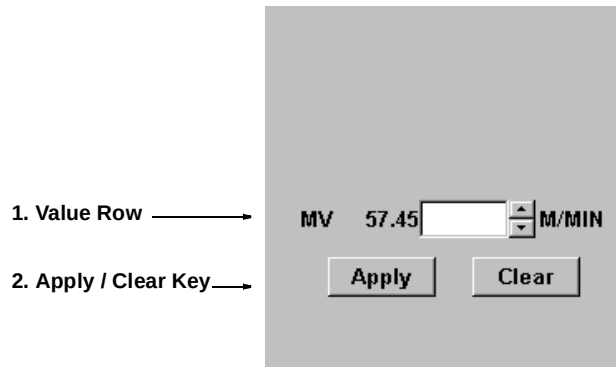
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
Label	3. Indicator Label	" ", any letter	

3.6 Analog Input DAT_AI

3.6.1 Dialog

3.6.1.1 DAiControl

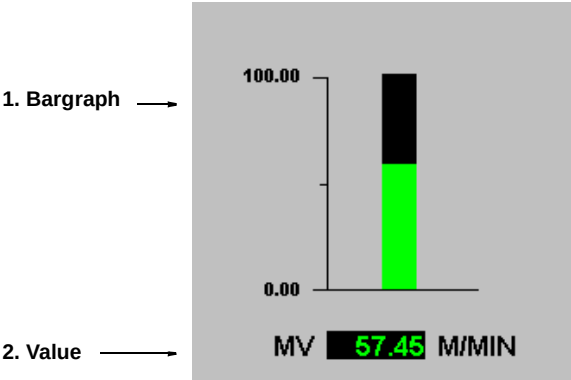


No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	MV	MV Black		<i>Text in front of the value</i>
1.2	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.3	Input Field	White	No value	
		Yellow	Entered value	
1.4	Spin Button			
1.5	Unit	Black	UNIT	<i>Object unit</i>
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.6.2 Presentation

3.6.2.1 DAiCloseup



No	Description	Presentation	Condition	Remarks
1	Bargraph Pre- sentation			Status Line
1.1	Range Max	Black	RANGE_MAX	Range Max of the object
1.2	Range Min	Black	RANGE_MIN	Range Min of the object
1.3	Value		VALUE	Object value
		X Red	The Value Quality is not OK	No subscription
		Green	-	
2	Value Row			The object value
2.1	MV	MV Black		Text in front of the value
2.2	Value		VALUE	Object value
		X X X Red	The Value Quality is not OK	No subscription
		Green	-	
2.3	Unit	Black	UNIT	Object unit

3.6.2.2 Numeric01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Green	-	<u>ValueColor</u> , <u>ValueFormat</u>

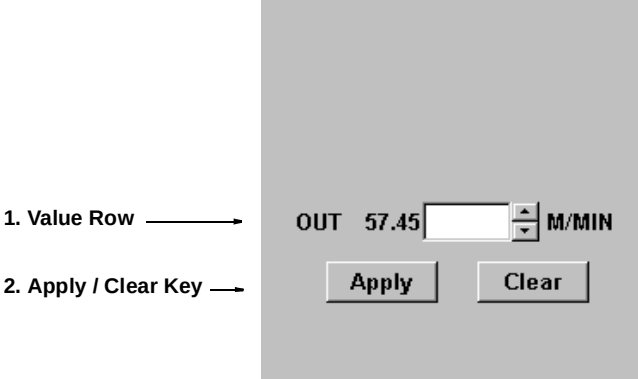
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals i possible</i>
ValueColor	2. Value	Green , any color	

3.7 Analog Output DAT_AO

3.7.1 Dialog

3.7.1.1 DAoControl



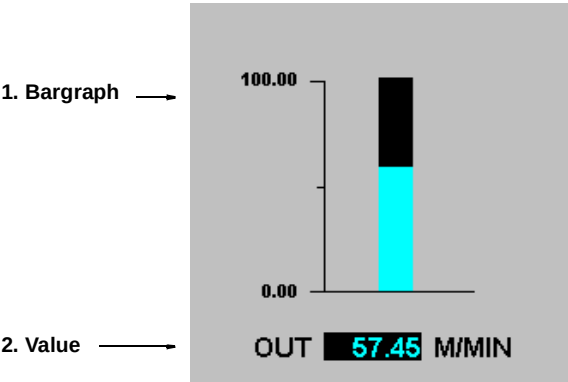
No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	OUT	OUT Black		<i>Text in front of the value</i>
1.2	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.3	Input Field	White	No value	
		Yellow	Entered value	
1.4	Spin Button			

No	Description	Presentation	Condition	Remarks
1.5	Unit	Black	UNIT	<i>Object unit</i>
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.7.2 Presentation

3.7.2.1 DAoCloseup



No	Description	Presentation	Condition	Remarks
1	Bargraph Pre-sentation			Status Line
1.1	Range Max	Black	RANGE_MAX	Range Max of the object
1.2	Range Min	Black	RANGE_MIN	Range Min of the object
1.3	Value		VALUE	Object value
		Cyan	-	
2	Value Row			The object value
2.1	OUT	OUT Black		Text in front of the value
2.2	Value		VALUE	Object value
		X X X Red	The Value Quality is not OK	No subscription
		Cyan	-	
2.3	Unit	Black	UNIT	Object unit

3.7.2.2 Numeric01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Cyan	-	<u>ValueColor</u> , <u>ValueFormat</u>

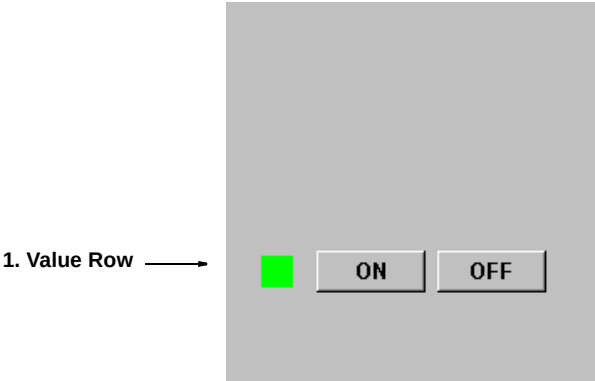
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals i possible</i>
ValueColor	2. Value	Cyan , any color	

3.8 Digital Input DAT_DI

3.8.1 Dialog

3.8.1.1 DDiControl

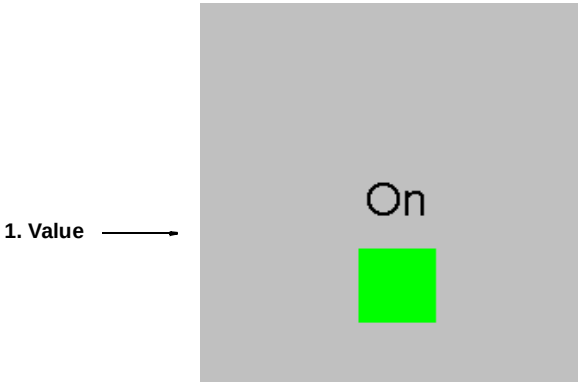


No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value Indication	X Red	The Value Quality is not OK	<i>No subscription</i>
		■ Filled Green	VALUE = 1	<i>Value</i>
		□ Unfilled Green	VALUE = 0	
1.2	ON / OFF Keys			

The property VALUE can be changed with the On/Off buttons. The change will be immediately applied.

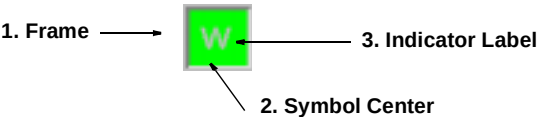
3.8.2 Presentation

3.8.2.1 DDiCloseup



No	Description	Presentation	Condition	Remarks
1	Value			Status Line
1.1	Value Text	X Red	The Value Quality is not OK	No subscription
	Value Text	On Black	VALUE = 1	Value text
		Off Black	VALUE = 0	
1.2	Value Indication	X Red	The Value Quality is not OK	No subscription
		■ Filled Green	VALUE = 1	Value indication
		□ Unfilled Green	VALUE = 0	

3.8.2.2 IndicatorBox01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Symbol Center		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	VALUE = 0	<u>OffColor</u>
		Green	VALUE = 1	<u>OnColor</u>
3	Indicator Label			<i>User defined characters</i>
		<u>Label</u> Grey		<u>LabelColor</u>

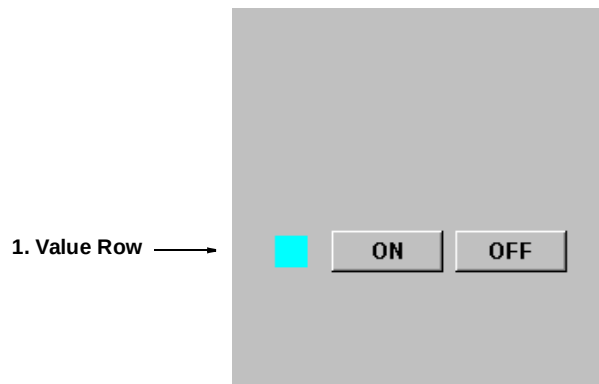
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
OnColor	2. Symbol Center	Green , any color	
OffColor	2. Symbol Center	Black , any color	
Label	3. Indicator Label	" ", any letter	
LabelColor	3. Indicator Label	Grey , any color	

3.9 Digital Output DAT_DO

3.9.1 Dialog

3.9.1.1 DDoControl

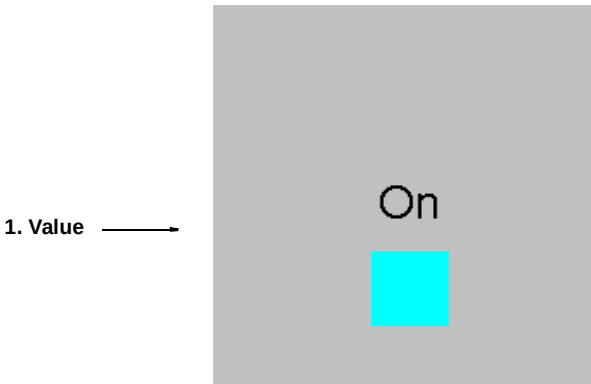


No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value Indication	X Red ☒ Filled Cyan ☐ Unfilled Cyan	The Value Quality is not OK VALUE = 1 VALUE = 0	<i>No subscription</i> <i>Value</i>
1.2	ON / OFF Keys			

The property VALUE can be changed with the On/Off buttons. The change will be immediately applied.

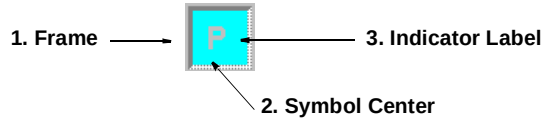
3.9.2 Presentation

3.9.2.1 DDoCloseup



No	Description	Presentation	Condition	Remarks
1	Value			Status Line
1.1	Value Text	X Red	The Value Quality is not OK	No subscription
	Value Text	On Black	VALUE = 1	Value text
		Off Black	VALUE = 0	
1.2	Value Indication	X Red	The Value Quality is not OK	No subscription
		■ Filled Cyan	VALUE = 1	Value indication
		□ Unfilled Cyan	VALUE = 0	

3.9.2.2 IndicatorBox01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Symbol Center		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	VALUE = 0	<u>OffColor</u>
		Green	VALUE = 1	<u>OnColor</u>
3	Indicator Label			<i>User defined characters</i>
		<u>Label</u> Grey		<u>LabelColor</u>

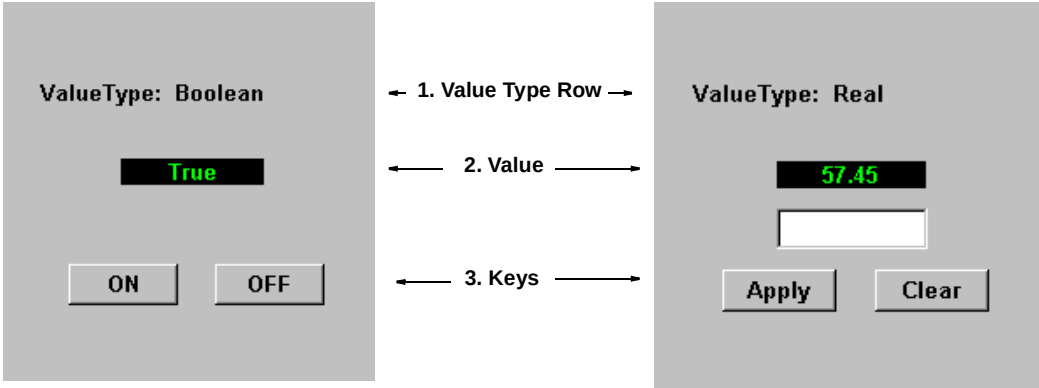
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
OnColor	2. Symbol Center	Green , any color	
OffColor	2. Symbol Center	Black , any color	
Label	3. Indicator Label	" ", any letter	
LabelColor	3. Indicator Label	Grey , any color	

3.10 Analog Input DAT_DAT

3.10.1 Dialog

3.10.1.1 DDatControl



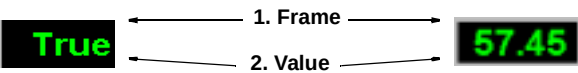
No	Description	Presentation	Condition	Remarks
1	Value Type Row			The object value type
1.1	ValueType	ValueType Black	-	Text in front of the value
1.2	No subscription	X X X Red	The Value Quality is not OK	No subscription
	Boolean	Boolean Black	If ValueType = vbBoolean	Boolean value
	Integer	Integer Black	If ValueType = vbInteger	Integer value
	Integer Long	Integer Long Black	If ValueType = vbLong	Integer Long value
	Real	Real Black	If ValueType = vbSingle	Real value
2	Value		VALUE	The object value
2.1		X X X Red	The Value Quality is not OK	No subscription
		True or False Green	If ValueType = vbBoolean	
		Green		

No	Description	Presentation	Condition	Remarks
2.2	Input Field		If ValueType = vbInteger or vbLong or vbSingle	
		White	No value	
		Yellow	Entered value	
3	Keys			
3.1	ON / OFF Key		If ValueType = vbBoolean	
3.2	Apply/ Clear Key		If ValueType = vbInteger or vbLong or vbSingle	

The VALUE property can be changed either with the ON/OFF buttons if the value is of type Boolean or by typing into the input field. The change will be immediately applied when using the ON/OFF buttons. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.10.2 Presentation

3.10.2.1 NumericString01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		True or False Green	If ValueType = vbBoolean	
		Green		

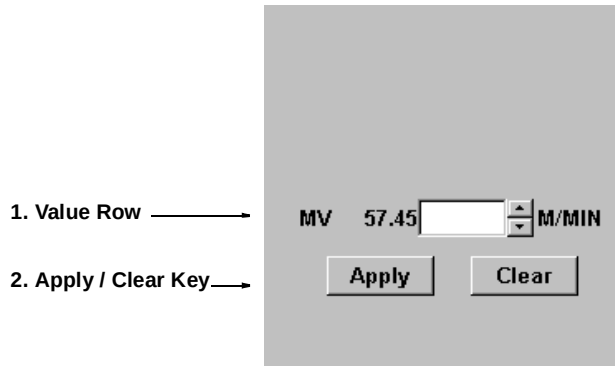
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>

3.11 Boolean Data MB

3.11.1 Dialog

3.11.1.1 MBControl



No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	MV	MV Black		<i>Text in front of the value</i>
1.2	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.3	Input Field	White	No value	
		Yellow	Entered value	
1.4	Spin Button			
1.5	Unit	Black	UNIT	<i>Object unit</i>
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.11.2 Presentation

3.11.2.1 NumericString01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Green	-	<u>ValueColor</u>

Configuration:

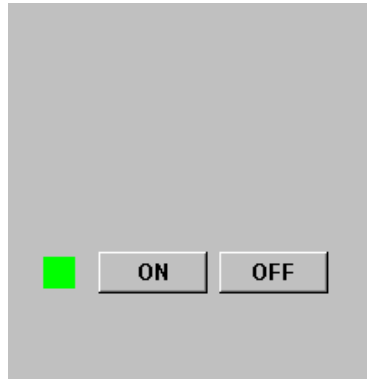
Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals i possible</i>
ValueColor	2. Value	Green , any color	

3.12 Boolean Value MBS

3.12.1 Dialog

3.12.1.1 MBSControl

1. Value Row →

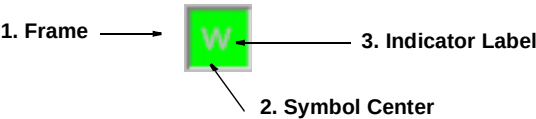


No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value Indication	X Red ■ Filled Green □ Unfilled Green	The Value Quality is not OK VALUE = 1 VALUE = 0	<i>No subscription</i> <i>Value</i>
1.2	ON / OFF Keys			

The property VALUE can be changed with the On/Off buttons. The change will be immediately applied.

3.12.2 Presentation

3.12.2.1 IndicatorBox01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Symbol Center		VALUE	<i>The object value</i>
		X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	VALUE = 0	<u>OffColor</u>
		Green	VALUE = 1	<u>OnColor</u>
3	Indicator Label			<i>User defined characters</i>
		<u>Label</u> Grey		<u>LabelColor</u>

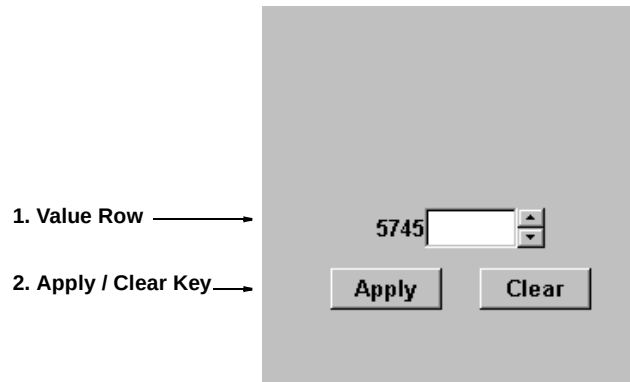
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat, 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	3	<i>In use only if FrameStyle is Raised or Sunken</i>
OnColor	2. Symbol Center	Green , any color	
OffColor	2. Symbol Center	Black , any color	
Label	3. Indicator Label	" ", any letter	
LabelColor	3. Indicator Label	Grey , any color	

3.13 Integer Data MI

3.13.1 Dialog

3.13.1.1 MIControl



No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.2	Input Field	White	No value	
		Yellow	Entered value	
1.3	Spin Button			
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.13.2 Presentation

3.13.2.1 Numeric01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Green	-	

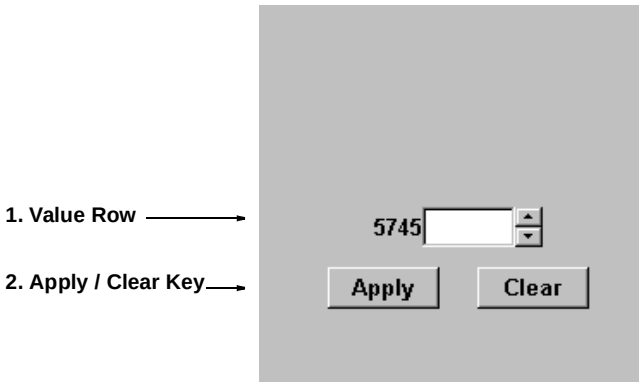
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>

3.14 Integer Long Data MIL

3.14.1 Dialog

3.14.1.1 MILControl



No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.2	Input Field	White	No value	
		Yellow	Entered value	
1.3	Spin Button			
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.14.2 Presentation

3.14.2.1 Numeric01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Green	-	

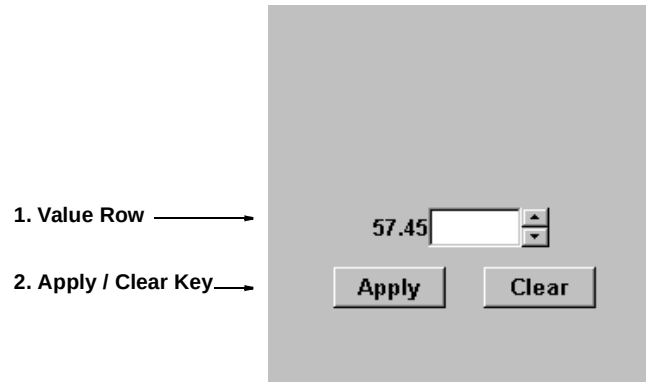
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>

3.15 Real Data MR

3.15.1 Dialog

3.15.1.1 MRControl



No	Description	Presentation	Condition	Remarks
1	Value Row			<i>The object value</i>
1.1	Value		VALUE	<i>Object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Black	-	
1.2	Input Field	White	No value	
		Yellow	Entered value	
1.3	Spin Button			
2	Apply/ Clear Key			

The VALUE property can be changed either with the spin button or by typing into the input field. When a value has been entered in the input field, it gets yellow background and the change is applied when the user presses the Apply button. If you press the CLEAR button, the value in the input field is deleted (an the input field gets blank).

3.15.2 Presentation

3.15.2.1 Numeric01



No	Description	Presentation	Condition	Remarks
1	Frame	Grey	<u>FrameStyle</u> = Flat or <u>FrameStyle</u> = Raised or <u>FrameStyle</u> = Sunken	<i>Three Dimensions effect</i> <u>FrameWidth</u>
2	Value		VALUE	<i>The object value</i>
		X X X Red	The Value Quality is not OK	<i>No subscription</i>
		Green	-	<u>ValueFormat</u>

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	0 - Flat , 1 - Raised and 2 - Sunken	
FrameWidth	1. Frame	0	<i>In use only if FrameStyle is Raised or Sunken</i>
ValueFormat	2. Value	0.00	<i>0 to 4 decimals i possible</i>

Chapter 4 Maintenance

Advant Connectivity Library for Advant Controller 100 Series is an option to the Advant Operator Workplace software package. Perform any required maintenance according to the instructions in the *Advant Workplace Products - Administrator's Guide*.

